AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-38. (Canceled).

39. (Currently Amended) A single-container method for synthesizing cDNA from RNA in a biological sample using a reverse transcriptase and amplifying and detecting at least one selected sequence of said cDNA, comprising:

a) combining said biological sample with a disruption reagent ~~containing~~ **comprising** a chaotropic salt having a concentration of at least 2M that denatures or degrades all proteins~~, including nucleases,~~ to produce a disrupted sample containing RNA freed from bound proteins and inactivating nucleases with no more than twenty-five percent loss of RNA;

b) reducing the concentration of chaotropic salt in said disrupted sample to less than 0.05M by diluting without washing the disrupted sample with at least one aqueous reagent before adding the reverse transcriptase;

c) incubating the diluted, disrupted sample with reverse transcriptase to transcribe said RNA to cDNA;

d) amplifying at least one selected sequence of said cDNA; and

e) detecting the at least one amplified cDNA sequence

wherein steps b) through e) are performed without first separating the RNA from degraded proteins or from said chaotropic salt.

40. (Currently Amended) The method according to claim 39, wherein said disruption reagent ~~includes~~ **comprises** a cell-lysing detergent.

41. (Previously Presented) The method according to claim 40, wherein said biological sample comprises at least one cell.

42. (Currently Amended) The method of claim 39, wherein step a) ~~includes~~ **comprises** heating to concentrate the chaotropic salt after combination of the biological sample with the disruption reagent.

43. (Previously Presented) The method of claim 42, wherein the initial concentration of said chaotropic salt is at least 2M.

44. (Previously Presented) The method of claim 42, wherein said heating is sufficient to produce a disrupted sample that is at least semi-dry.

45. (Currently Amended) The method of claim 44, wherein said disruption reagent ~~includes~~ **comprises** a water-miscible solvent that prevents precipitation of the chaotropic salt and that evaporates during said heating.

46. (Previously Presented) The method of claim 39, wherein the chaotropic salt is a dry reagent that is dissolved in the biological sample.

47. (Previously Presented) The method of claim 39, wherein the container is a microfluidic device.

48. (Currently Amended) The method of claim 39, wherein in step ~~a)~~ **b)** the concentration of chaotropic salt is reduced to less than 0.01M.

49. (Previously Presented) The method of claim 48, wherein the chaotropic salt is a dry reagent that is dissolved in the biological sample.

50. (Currently Amended) The method of claim 49, wherein the biological sample ~~includes~~ **comprises** phosphate buffered saline (PBS).

51. (Previously Presented) The method of claim 49, wherein said dry reagent is adhered to a surface of the container.

52. (Currently Amended) The method of claim 51, wherein said surface is the inner surface of a tube, a tube cap, a wall of a microtiter plate, ~~of~~ **or** a microtiter plate cover.

53. (Previously Presented) The method of claim 49, wherein the chaotropic salt has a concentration of at least 2M when dissolved in the biological sample.

54. (Currently Amended) The method of claim 53, wherein step a) ~~includes~~ **comprises** heating to concentrate the chaotropic salt after combination of the biological sample with the disruption reagent.

55. (Canceled)

56. (Currently Amended) The method of claim ~~55~~ **42**, wherein step b) ~~includes~~ **comprises** diluting with water ~~containing~~ **comprising** random hexamers, heating to denature double strands, and cooling to anneal the random hexamers to the RNA.

57. (Previously Presented) The method of claim 56, wherein step c) comprises adding reverse transcriptase and RT buffer in an amount that does not further dilute the disrupted, diluted sample from step b) by more than a factor of six.

58. (Previously Presented) The method of claim 57, wherein in step d) amplification is carried out in amplification buffer added in this step and wherein that addition dilutes the cDNA by a factor of at least nine.

59. (Previously Presented) The method of claim 54, wherein the initial concentration of chaotropic salt is at least 2M.

60. (Previously Presented) The method of claim 59, wherein said heating is sufficient to produce a disrupted sample that is at least semi-dry.

61. (Currently Amended) The method of claim 60, wherein said disruption reagent ~~includes~~ **comprises** a water-miscible solvent that prevents precipitation of the chaotropic salt and that evaporates during said heating.

62. (Previously Presented) The method of claim 61, wherein the solvent is DMSO.

63. (Currently Amended) The method of claim 61, wherein said disruption reagent ~~includes~~ **comprises** a cell-lysing detergent.

64. (Currently Amended) The method of claim 63, wherein said biological sample ~~contains~~ **comprises** at least one cell.

65. (Currently Amended) The method of claim 60, wherein step b) includes diluting progressively with three aqueous solutions : a first solution ~~containing~~ **comprising** DNase, a second solution ~~containing~~ **comprising** a chelating agent, and a third solution ~~containing~~ **comprising** random hexamers, and wherein the container is heated following addition of the chelating agent.

66. (Currently Amended) The method of claim 39, wherein amplification and detection reagents are added in step c) and wherein step c) further dilutes the disrupted, diluted sample by at least a factor of nine.

67. (New) The method of claim 39, wherein the proteins that are denatured or degraded comprise nucleases.